

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO.                         | FILING DATE   | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.      | CONFIRMATION NO. |
|---|---------------|----------------------|--------------------------|------------------|
| 10/680,222                              | 10/08/2003    | Kwang-Young Im       | 1572.1183                | 4173             |
| 21171 . 759                             | 90 06/30/2005 |                      | EXAMINER                 |                  |
| STAAS & HALSEY LLP                      |               |                      | LOUIS JACQUES, JACQUES H |                  |
| SUITE 700<br>1201 NEW YORK AVENUE, N.W. |               |                      | ART UNIT                 | PAPER NUMBER     |
| WASHINGTON, DC 20005                    |               |                      | 3661                     |                  |
|   |               |                      | DATE MAILED: 06/30/2005  | 5                |

Please find below and/or attached an Office communication concerning this application or proceeding.

| •   | Application No.  | Applicant(s)   |  |  |  |
|---|--|--|--|--|--|
|   | 10/680,222   | IM, KWANG-YOUNG  |  |  |  |
| Office Action Summary   | Examiner   | Art Unit   |  |  |  |
|   | Jacques H. Louis-Jacques   | 3661   |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  |  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 66(a). In no event, however, may a reply be time<br>within the statutory minimum of thirty (30) days<br>rill apply and will expire SIX (6) MONTHS from<br>cause the application to become ABANDONE | nely filed s will be considered timely. the mailing date of this communication. O (35 U.S.C. § 133). |  |  |  |
| Status  |  |  |  |  |  |
| 1) Responsive to communication(s) filed on 08 O   | <u>ctober 2003</u> .   |  |  |  |  |
| <u></u>   | 2a) This action is <b>FINAL</b> . 2b) This action is non-final.  |  |  |  |  |
| 3) Since this application is in condition for allowar   |  |  |  |  |  |
| closed in accordance with the practice under E  | x parte Quayle, 1935 C.D. 11, 45   | 33 O.G. 213.   |  |  |  |
| Disposition of Claims   |  |  |  |  |  |
| 4) Claim(s) <u>1-15</u> is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  |  |  |  |  |  |
| 5) Claim(s) is/are allowed.   |  |  |  |  |  |
| 6)⊠ Claim(s) <u>1-15</u> is/are rejected.   |  |  |  |  |  |
| 7) Claim(s) is/are objected to.   |  |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or   | election requirement.  |  |  |  |  |
| Application Papers  |  |  |  |  |  |
| 9) The specification is objected to by the Examine  | r.   |  |  |  |  |
| 10)☐ The drawing(s) filed on is/are: a)☐ acce   | epted or b) $\square$ objected to by the E   | Examiner.  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |  |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  |  |  |  |  |  |
|   | arimier. Note the attached Office  | Action of form P10-152.  |  |  |  |
| Priority under 35 U.S.C. § 119  |  |  |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> </ul>  |  |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No  |  |  |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage   |  |  |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).   |  |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.  |  |  |  |  |  |
| Attachment(s)   |  |  |  |  |  |
| Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 4) Interview Summary<br>Paper No(s)/Mail Da  |  |  |  |  |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 10082003.  |  | atent Application (PTO-152)  |  |  |  |

Page 2

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers

have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statement filed on October 8, 2003 fails to comply with 37

CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is

presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about

the content of the information, of each patent listed that is not in the English language. It has

been placed in the application file, but the information referred to therein has not been

considered.

The "explanations of relevancy of references" document provided as attachment 1(e) is

not sufficient. The attachment merely provides a general statement that "The foreign

references relate to material control systems". This is insufficient. In addition, 37 CFR

1.98 requires a "concise explanation of the relevance ... of each patent listed that is not in

the English language".

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

Art Unit: 3661

international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Weiss et al [US 2002/0161618].

Weiss et al discloses an integrated scheduler and material control system that selects an optimum transport route by calculating a prospective transport time between a source node and a destination node [0007]. According to Weiss et al, there is provided receiving and managing real layout information and real-time job information of a load and a waiting job number of a storehouse according to respective links (nodes) [0010], [0019], creating a data structure based on the real layout information and the real-time job information, and updating the data structure by receiving the real layout information and the real-time job information periodically [0008], creating a route search structure based on a route search demand [0009], [0010], calculating a prospective transport time according to the respective links within the route search structure [0010], and selecting a transport route having a minimum prospective transport time of the respective links within the route search structure to reach the destination node from the source node, as the optimum transport route [0010], [0020], [0020]. According to Weiss et al, the prospective transport time by receiving the layout information and the real-time job information in a predetermined period of time from the transport order manager and by modeling the information, and to select a transport route having a minimum prospective transport time as the optimum transport route [0025]. Weiss et al also discloses the realtime job information comprises information on transport vehicle traffic [0018], [0021], information on errors of transport vehicles in production lines [0033], [0035]. In addition,

Application/Control Number: 10/680,222

Page 4

Art Unit: 3661

Weiss et al discloses that the prospective transport time is increased if the load and the waiting job number of the storehouse are increased, and the prospective transport time is decreased if the load and the waiting job number of the storehouse are decreased and that the prospective transport time is increased if the traffic of the transport vehicle is increased, and the prospective transport time is decreased if the traffic of the transport vehicle is decreased [0033]. Furthermore, Weiss et al discloses receiving a transport order from the transport order manager, requesting the optimum route for a route search, and transmitting a result of the route search so that the material control system is executed [0019], [0021]. In addition, Weiss et al discloses receiving the transport order and transmitting the transport order to the transport order manager. There is also provided, according to Weiss et al, performing the route search upon request from the transport order executing part and updating the route search by periodically receiving real-time information from the transport order manager [0005], [0006]. The real layout information, according to Weiss et al, comprises information on transport orders, transport equipment condition, and transport vehicles [0007] and the prospective transport time is calculated based on distance between the respective unit links, speed of a transport vehicle in a traveled region of the respective unit links, and vehicle transport traffic [0023].

## Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Application/Control Number: 10/680,222 Page 5

Art Unit: 3661

Each of the below cited prior art references is considered to be very pertinent to applicant's claimed invention. Therefore, Applicant is strongly suggested to consider these references in reply to this office action.

| 5,122,959      | Nathanson et al  | Jun. 1992 |
|----------------|------------------|-----------|
| 5,265,006      | Asthana et al    | Nov. 1993 |
| 5,586,021      | Fargher et al    | Dec. 1996 |
| 5,897,629      | Shinagawa et al  | Apr. 1999 |
| 6,246,931      | Shinogi          | Jun. 2001 |
| 6,484,092      | Seibel           | Nov. 2002 |
| 6,873,963      | Westbury et al   | Mar. 2005 |
| US 20020019759 | Arunapuram et al | Feb. 2002 |
| US 20020143598 | Scheer           | Oct. 2002 |
| US 20030014286 | Cappellini       | Jan. 2003 |
| US 20030195794 | Yasuda           | Oct. 2003 |

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacques H. Louis-Jacques whose telephone number is 571-272-6962. The examiner can normally be reached on M-Th 5:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on 571-272-6956. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 10/680,222

Art Unit: 3661

Page 6

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jacques H Louis-Jacques Primary Examiner Art Unit 3661

/jlj